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6		Application Number	09/725,393
TRANSMITTAL FORM  used for all correspondence after initial filing)		Filing Date	November 29, 2000
		Inventor(s)	Arnab DAS et al.
		Group Art Unit	2112
		Examiner Name	Paul R. Myers
		Attorney Docket Number	29250-002085/US
	ENCL	OSURES (check all that apply)	
Fee Transmittal Form		ment Papers Application)	After Allowance Communication to Group
Fee Attached		to the Official Draftsperson and Sheets of Formal Drawing(s)	LETTER SUBMITTING APPEAL BRIEF AND APPEAL BRIEF (w/cl- version of pending claims)
Amendment	Licens	ing-related Papers	Appeal Communication to Group (Notice of Appeal)
After Final	Petition	n	Proprietary Information
Affidavits/declaration(s)	. —	n to Convert to a ional Application	Status Letter
Extension of Time Request		of Attorney, Revocation e of Correspondence Address	Other Enclosure(s) (please identify below):
Express Abandonment Request	1=	nal Disclaimer st for Refund	-REPLY BRIEF
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Certified Copy of Priority Document(s)	Rema	T	
Response to Missing Parts/ Incomplete Application	MAIL	STOP Appeal Brid	efs – Patents
Response to Missing Parts under 37 CFR 1.52 or 1.53			
SIGN	ATURE OF A	APPLICANT, ATTORNEY, C	OR AGENT
Firm or Individual name  Harness, Dickey		Attornov Namo	Reg. No. 35,416
Signature	2	16/	
Date December 21,	.2005		



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants:

Arnab DAS et al.

Appeal No. \_\_\_\_\_

Serial No.:

09/725,393

Group: 2112

Filed:

November 29, 2000

Examiner: Paul R. Myers

For:

SUB-PACKET ADAPTATION IN A WIRELESS

COMMUNICATION SYSTEM

## REPLY BRIEF UNDER 37 C.F.R. § 41.41

December 21, 2005

#### MAIL STOP REPLY BRIEF - PATENTS

U.S. Patent and Trademark Office Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Dear Sir:

Appellants respectfully request that the Appeal Board consider the enclosed remarks pursuant to 37 C.F.R. § 41.41, which are filed in response to the Examiner's Answer mailed on October 21, 2005.

Remarks begin on page 2 of this Reply Brief.

## REMARKS

On pages 3 and 6 of the Examiner's Answer, the Examiner submits that a situation in which an input packet is not fragmented, but merely output as a sub-packet as taught by Bruckman (U.S. Patent Publication No. 2002/0051466) allegedly corresponds to the "repeating," of claims 1 and 24. The Examiner also contends that the fragmentation of an input packet into smaller sub-packets as taught by Bruckman allegedly corresponds to the "puncturing," of claims 1 and 24. Appellants disagree.

With regard to FIG. 3 of the present application, at a transmitter, an encoder packet of, for example, 3,072 bits may be turbo-coded at 1/5 rate to produce a channel encoded encoder packet of 15,360 bits. This channel encoded encoder packet may then be punctured and/or repeated to generate multiple (e.g., 4) encoder sub-packets.

In at least one example embodiment of the present invention, puncturing comprises retaining a portion of the bits within the channel coded encoder packet to generate a channel coded encoder sub-packet. In one example, bits within the channel coded encoder packet may be punctured by retaining four out of every six bits. In other words, two out of every six bits may be dropped from the channel coded encoder packet. This example puncturing may generate a channel coded encoder sub-packet having a smaller number of bits than the channel coded encoder packet. For example, with regard to FIG. 3 of the present application, a channel coded encoder packet may include 15,360

bits. In order to generate channel coded encoder sub-packet including 13,824 bits, 1 out of every 10 bits may be dropped.

Moreover, in at least one example embodiment of the present invention, repeating comprises repeating at least a portion of the bits within the channel coded encoder packet to generate a channel coded encoder sub-packet. In one example, each bit may be repeated once to generate a channel coded encoder sub-packet having twice the number of bits as the channel coded encoder packet. For example, with regard to FIG. 3 of the present application, a channel coded encoder packet may include 15,360 bits. In order to generate channel coded encoder sub-packet including 24,576 bits, 3 out of every 5 bits may be repeated.

Puncturing and repeating may be performed separately or in combination with one another to generate a channel coded encoder sub-packet associated with a desired transmission rate.

In covering aspects of the above discussed example embodiment, claim 1, for example, recites "puncturing and/or repeating the channel coded encoder packet to produce a first encoder sub-packet."

As will be appreciated, the fragmenting of Bruckman does not constitute the "puncturing," of claims 1 and 24. To the contrary, the fragmenting of Bruckman merely **fragments or slices** an input packet into multiple smaller packets. Each fragment represents a **portion of the original packet** data, and all fragments must be received to recover the original packet data. On the other hand, as discussed above, "puncturing," includes dropping of a portion of

bits in the channel coded encoder packet to create a channel encoded encoder sub-packet.

Furthermore, the transmission of unique sub-packets collectively representing an input packet, as taught by Bruckman, is clearly not the "repeating," of claim 1, for example.

For at least this reason, Bruckman fails to teach at least, "puncturing and/or repeating," as set forth in claims 1 and 24.

### CONCLUSION

Appellants respectfully request that the Appeal Board consider the above remarks in conjunction with the remarks previously made in the Appeal Brief filed on August 10, 2005, and reverse the Examiner's anticipation and obviousness rejection of claims 1-14 and 16-24.

Appl. Serial No. 09/725,393 Appeal No. \_\_\_\_\_

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By:

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